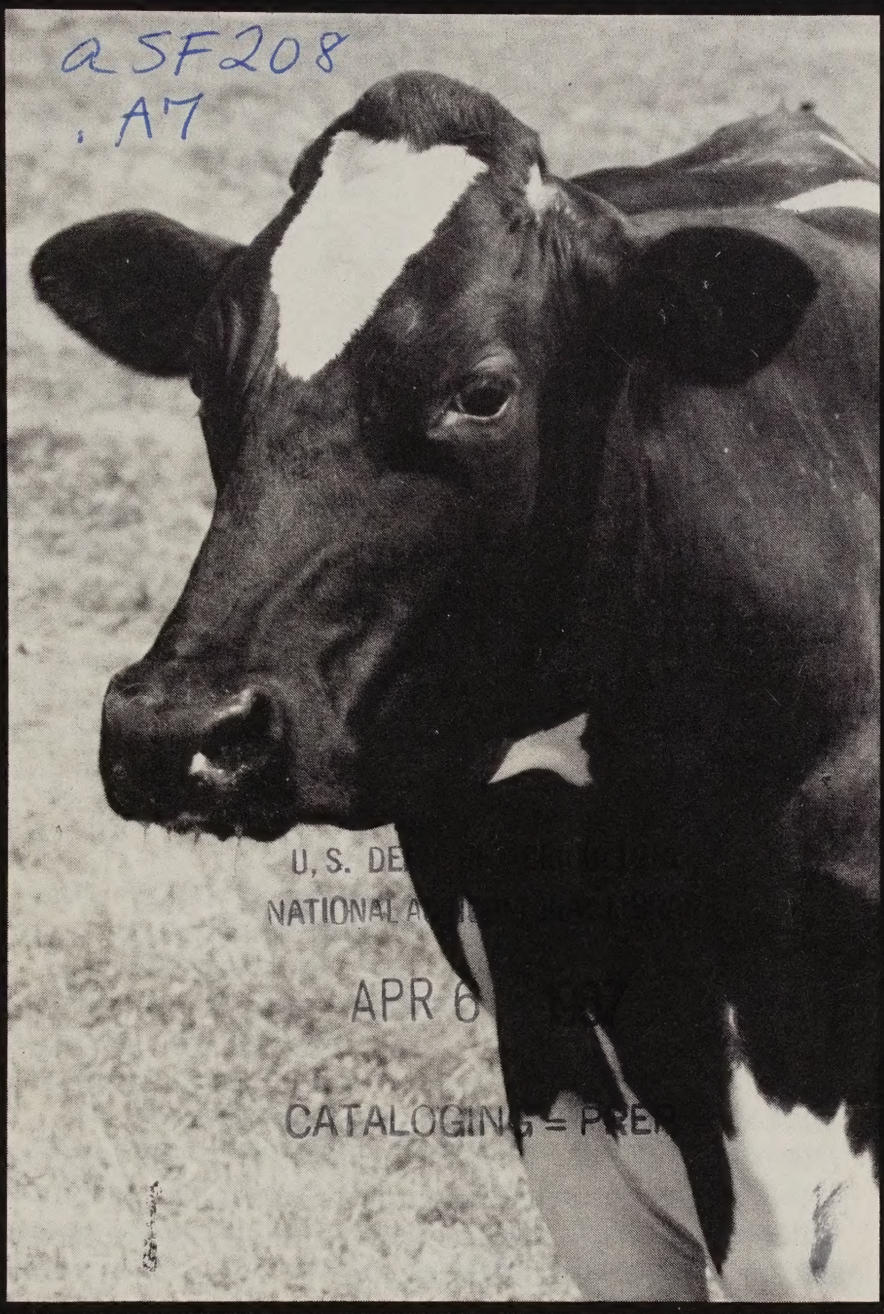
Avoiding Drug Residues in Cull Dairy Cows



The United States Department of Agriculture
In cooperation with the Washington State University

Avoiding Drug Residues in Cull Dairy Cows

The dairy industry is a major source of beef—with over 11 million dairy cattle in the United States and an annual cull rate of about 25 percent. Injections and other forms of medication can leave drug residues above allowable limits in the meat and edible organs of a cull cow. The U.S. Department of Agriculture has the authority to condemn adulterated carcasses.

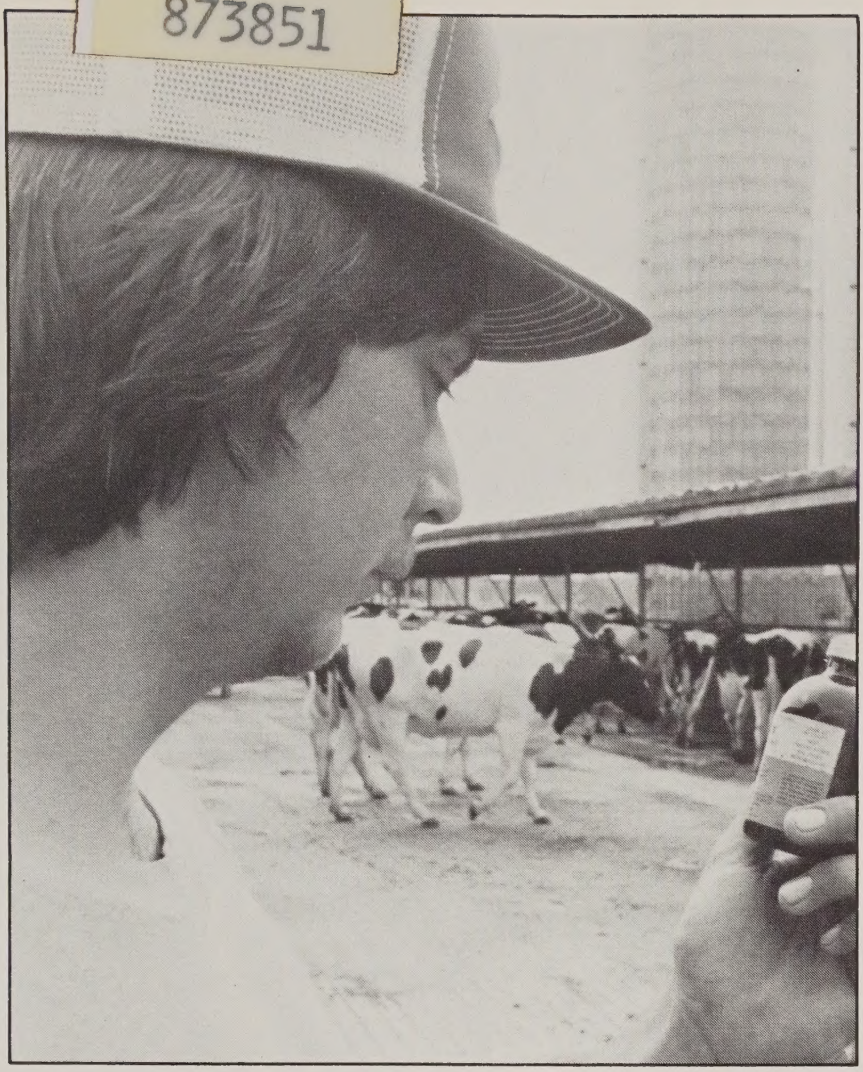
In addition to being illegal, drug residues are costly. If 0.8 percent of the 2.75 million cull cows slaughtered per year are condemned for drug residues, the loss to the industry would be about $11 million—at $500 per cow. News of residue problems makes consumers lose confidence in the safety of the meat supply, and meat sales decline.

Dairy farmers are accustomed to taking precautions to keep milk free of drug residues. It is equally important to market residue-free cull cows. This brochure offers tips on how to avoid drug residue problems in meat, including information on the Live Animal Swab Test—LAST—an easy-to-perform urine test that shows overnight whether an antibiotic-treated cow is free of drug residues and ready for maket.

Residue Testing

USDA tests cull cows for drug residues as a part of the meat inspection process. Randomly selected carcasses are routinely checked. In addition, when USDA inspectors suspect a residue problem because of signs of poor health or injections, they perform a speedy test—called STOP, for Swab Test on Premises—at the slaughtering plant. If STOP is positive, the carcass must be retained at the plant while laboratory tests are run to determine the type and amount of antibiotic present.

Raw meat containing residues above tolerance levels set by the Food and Drug Administration (FDA) is considered adulterated. Contaminated carcasses are condemned and cannot be sold for food. Flagrant or repeated violations of the law can result in prosecution of producers.



Read the label on all types of medication and follow instructions carefully.

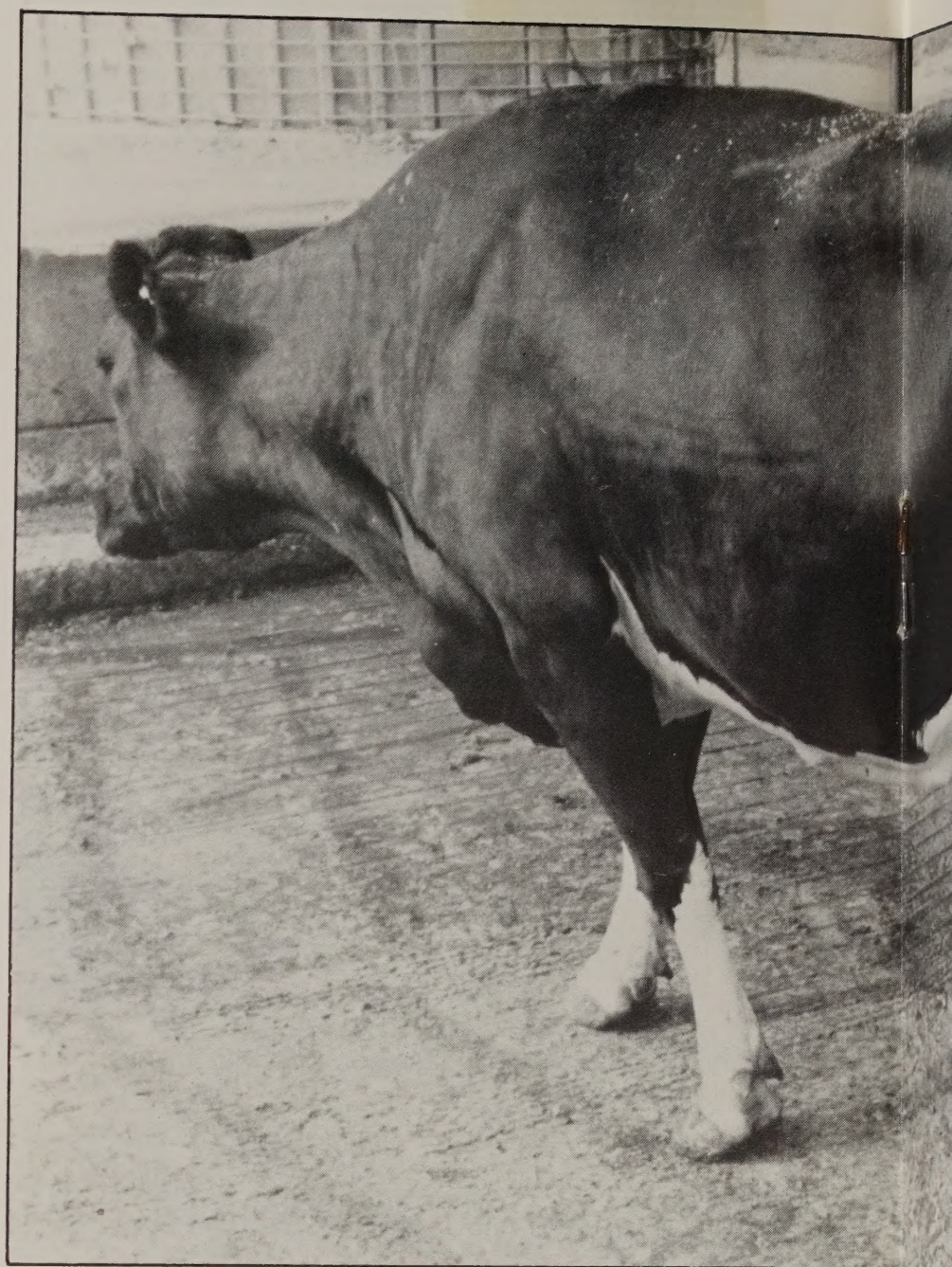
How to Avoid Drug Residues

Use medications only when necessary. Use of antibiotics may not be beneficial for the cow's conditions and may actually decrease its value. If you decide to use them, read the label and follow instructions.

Do not exceed the recommended dosage or change the treatment interval without specific instructions from the veterinarian treating the cow. The FDA approves each animal drug only for certain species and conditions for which research has shown the drug is safe and effective. Other uses could have adverse effects on the cow and could leave violative residues in milk or meat.

Therefore:

- Use only the dosage prescribed on the label.
- Use drugs only for conditions described on the label.
- Use only according to the schedule on the label.
- Keep the cow on the farm during the entire withdrawal period.
- For peace of mind, perform the Live Animal Swab Test—LAST—before marketing an antibiotic-treated cow.



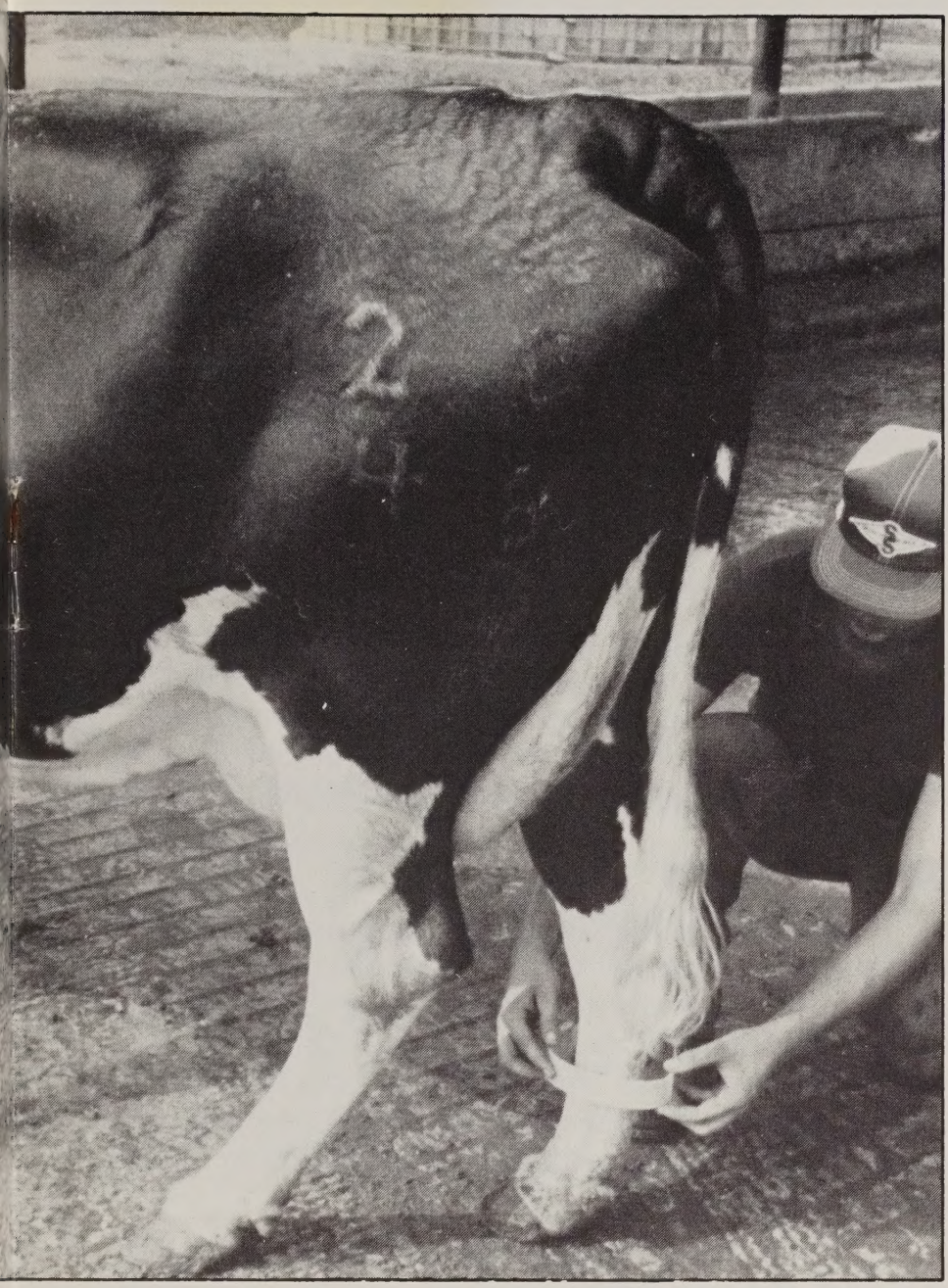
Mark treated cows with leg bands or other devices so it's easy to spot a cow not ready for slaughter.

The main cause of drug residue problems is failure to allow sufficient time between treatment and marketing for the drug to clear the animal's system.

To make certain an antibiotic-treated cow is free of residue problems, the LAST step to do before marketing it is to perform LAST (the Live Animal Swab Test). This on-the-farm test is an adaption of the STOP test. Step-by-step instructions are available from USDA in a handbook and on an audio-tape cassette. For a copy of the directions and the names of firms manufacturing LAST kits, write:

USDA, FSIS Publications
Room 1165-South
Washington, DC 20250

- *Keep accurate records* as a part of your daily farm practice. Memory is a poor substitute for written records. Keep individual cow records, daily calendars, or treatment logs. Record treatment dates, the medication, the amount given, and the withdrawal time.



- *Limit the number of persons who administer drugs.*

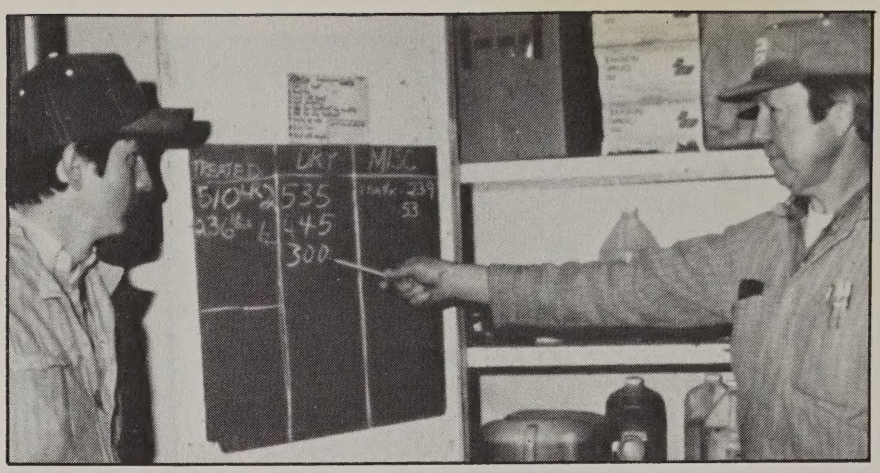
The lack of communication between farm personnel can lead to expensive mistakes—dumped milk and condemned carcasses.

- *Make communication between farm workers easy* by marking treated cows with chalk or paint or by applying leg bands, bells, or tape on the tail. Bulletin boards, black boards, and other accessible record systems also aid in communication.
- *Separate medicated cows*. This alerts others that treatments have been given. It also helps prevent infections from spreading to healthy animals.

Potential Sources of Residues

Extra-Label Drug Use

Due to the cost of research in clearing drugs for use with different ailments, manufacturers may only provide recommendations for use on limited ailments.



A blackboard is a handy place to record which cows received drugs.

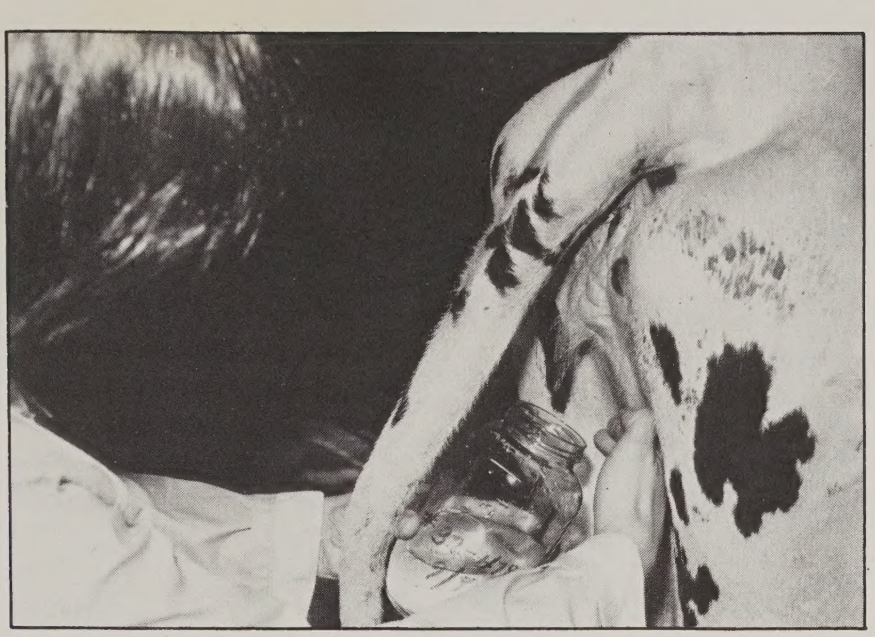
However, beneficial uses for ailments other than recommended uses have been found. But, again, withdrawal times are unknown for uses other than those recommended. A veterinarian should be consulted before using a drug in an extra-labeled manner.

Record Keeping

Too often treatments are not recorded as part of the daily farm practice. When an animal is to be culled, confusion may occur as to the last treatment date and drug used; memory is a poor substitute for written records at this time. Individual cow records, daily calendars, or treatment logs are all useful for this purpose but, of course, must be maintained on a daily basis to be successful.

Avoid Residues

- Aim management practices at minimizing the need for drug treatments.
- Follow label directions when treating cows and consult your veterinarian.
- Observe recommended withdrawal times.
- Be sure other farm personnel know which cows have been treated.
- Mark treated cows clearly.
- Keep accurate and current written records of all cattle treated.
- Be sure other farm personnel know where treatment records are kept and how to read them.
- Do not rely on memory when culling time comes.
- Check cows for antibiotic residues by performing LAST.



Check an antibiotic-treated cow for drug residues by performing LAST on its urine.

Other Materials Available from Your Extension Office

Mastitis Control and Drug Residue Problems
Prepared by Iowa State University

Feed Handling Systems
Prepared by Iowa State University

Feed Mixing Systems
Prepared by Iowa State University

Labeling Antibiotic Treated Cows
Prepared by the University of Nebraska

How to Prevent Antibiotic Contamination of Milk and Meat
Prepared by the University of Nebraska

Sulfa Residue Problems in Calves
Prepared by Pennsylvania State University

Dairy Calf Management and Drug Residues
Prepared by Iowa State University

Revised December 1985